

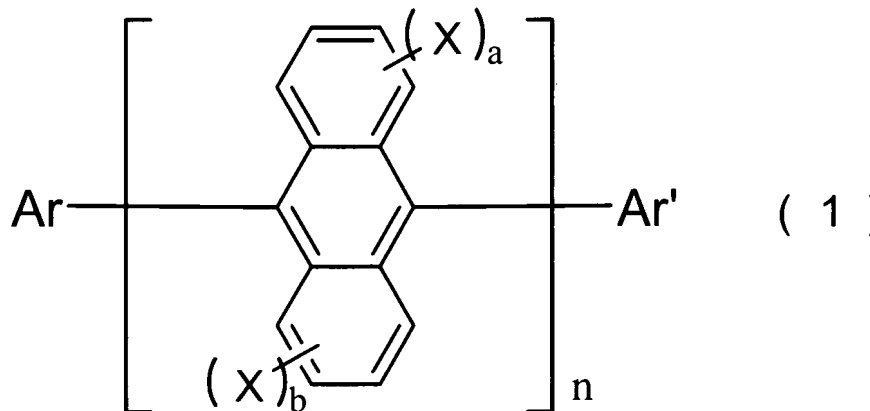
### REMARKS

Claims 1-11, as amended, remain herein. Claims 1 and 6 have been amended. Support for the amendment can be found throughout the specification (see, e.g., page 9, lines 19-21 of the specification; see also compounds AN7 and AN8 at page 24 of the specification). New claim 11 has been added. Support for the new claim can be found throughout the specification (see, e.g., page 10 of the specification; see also compounds AN1 through AN12, AN16, and AN20 at pages 23-27 of the specification).

1. Claim 6 was rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. Claim 6 has been amended to moot this rejection.

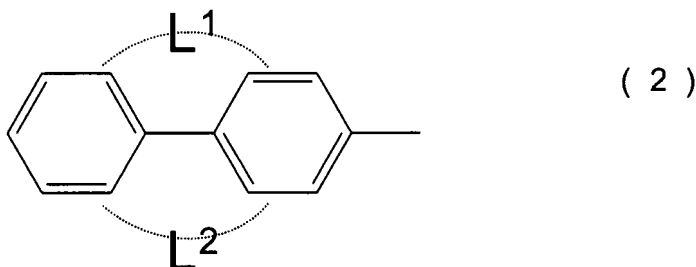
2. Claims 1-10 were rejected under 35 U.S.C. § 102(b) over Hosokawa et al. EP 1,167,488. The Office Action states that compounds EM6, EM27, and EM28 of Hosokawa '488 anticipate applicants' claims.

Applicants' claim 1 recites an anthracene derivative represented by following general formula (1):



wherein Ar represents a substituted or unsubstituted group represented by following general

formula (2):



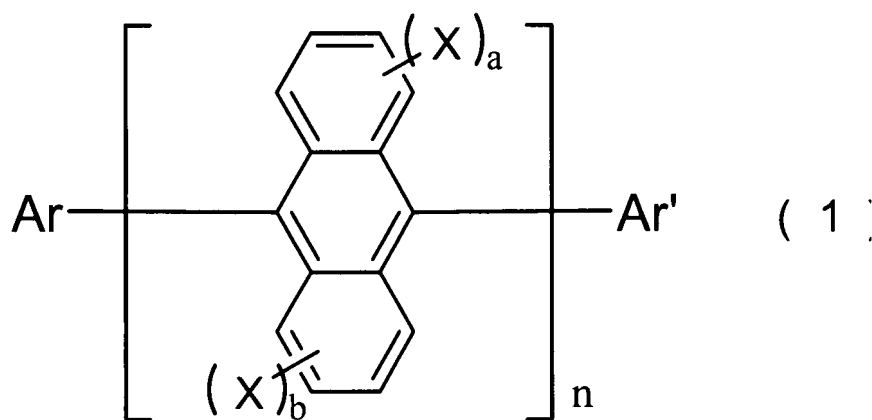
$L^1$  and  $L^2$  each representing a substituted or unsubstituted linking group wherein the two phenyl rings in formula (2) are linked through one or more carbon atoms and the two phenyl rings are not conjugated, which forms a cyclic structure, and at least one of the groups represented by  $L^1$  and  $L^2$  being present.

Compounds EM6, EM27, and EM2 of Hosokawa '488 do not disclose applicants' claimed Ar group including  $L^1$  and  $L^2$  linking group wherein the two phenyl rings in formula (2) are linked through one or more carbon atoms and the two phenyl rings are not conjugated, which forms a cyclic structure, and at least one of the groups represented by  $L^1$  and  $L^2$  being present. The phenyl rings of the biphenyl group in compounds EM6, EM27, and EM28 of Hosokawa '488 are not linked through one or more carbon atom, as required by applicants' claims, but through a Nitrogen atom.

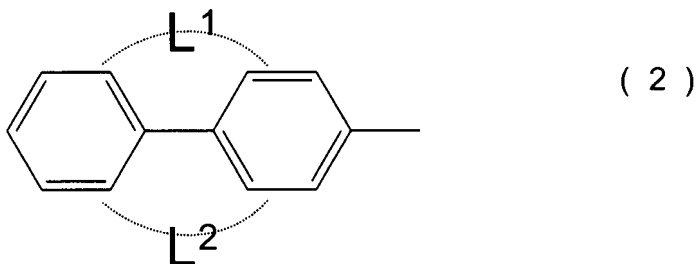
Furthermore, none of Hosokawa '488 formulae or exemplified compounds discloses applicants' claimed  $L^1$  and  $L^2$  linking group. Thus, Hosokawa '488 does not disclose all limitations of applicants' claims 1-11, and, therefore, it is not a proper basis for a rejection under § 102(b). Applicants respectfully request reconsideration and withdrawal of this rejection.

3. Claims 1, 2, and 4-6 were rejected under 35 U.S.C. § 102(b) over Shi et al. U.S. Patent 5,935,721. The Office Action states that compounds 28 and 29 of Shi '721 anticipate applicants' claims.

Applicants' claim 1 recites an anthracene derivative represented by following general formula (1):



wherein Ar represents a substituted or unsubstituted group represented by following general formula (2):



$L^1$  and  $L^2$  each representing a substituted or unsubstituted linking group wherein the two phenyl rings in formula (2) are linked through one or more carbon atoms and the two phenyl rings are not conjugated, which forms a cyclic structure, and at least one of the groups represented by  $L^1$  and  $L^2$  being present.

Shi '721 does not disclose applicants' claimed Ar group including  $L^1$  and  $L^2$  linking

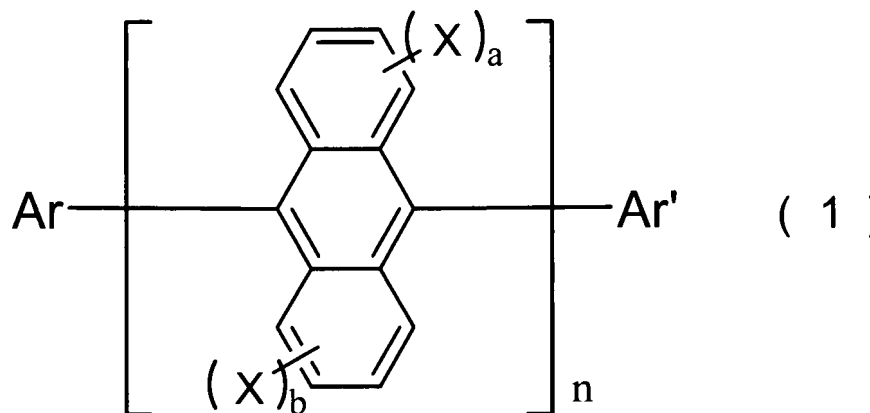
group wherein the two phenyl rings in formula (2) are linked through one or more carbon atoms and the two phenyl rings are not conjugated, which forms a cyclic structure, and at least one of the groups represented by  $L^1$  and  $L^2$  being present. Unlike applicants' claimed Ar group, the phenyl rings in compounds 28 and 29 of Shi '721 are conjugated.

Furthermore, none of Shi '721 formulae or exemplified compounds discloses applicants' claimed  $L^1$  and  $L^2$  linking group.

Thus, Shi '721 does not disclose all limitations of applicants' claims 1, 2, and 4-6, and, therefore, it is not a proper basis for a rejection under § 102(b). Applicants respectfully request reconsideration and withdrawal of this rejection.

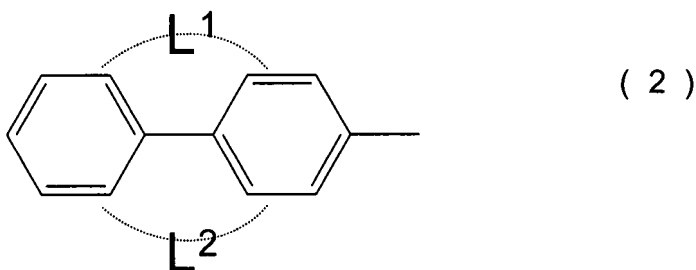
4. Claims 1-2 were rejected under 35 U.S.C. § 102(b) over Kobori *et al.* U.S. Patent 6,285,039. The Office Action states that compounds E-3-412, E-3-512, E-3-612, E-3-712, E-3-8 of Kobori '039 anticipate applicants' claims.

Applicants' claim 1 recites an anthracene derivative represented by following general formula (1):



wherein Ar represents a substituted or unsubstituted group represented by following general

formula (2):



$L^1$  and  $L^2$  each representing a substituted or unsubstituted linking group wherein the two phenyl rings in formula (2) are linked through one or more carbon atoms and the two phenyl rings are not conjugated, which forms a cyclic structure, and at least one of the groups represented by  $L^1$  and  $L^2$  being present.

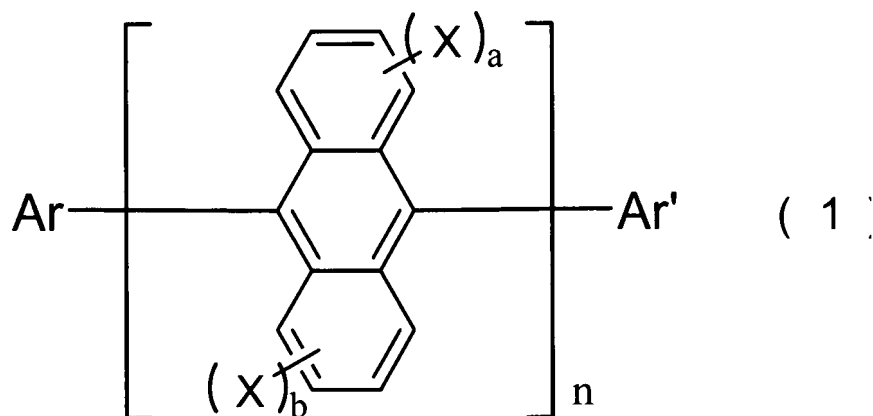
Kobori '039 does not disclose applicants' claimed Ar group including  $L^1$  and  $L^2$  linking group wherein the two phenyl rings in formula (2) are linked through one or more carbon atoms and the two phenyl rings are not conjugated, which forms a cyclic structure, and at least one of the groups represented by  $L^1$  and  $L^2$  being present. Unlike applicants' claimed Ar group, the phenyl rings in compounds E-3-412, E-3-512, E-3-612, E-3-712, E-3-8 of Kobori '039 are conjugated.

Furthermore, none of Kobori '039 formulae or exemplified compounds discloses applicants' claimed  $L^1$  and  $L^2$  linking group.

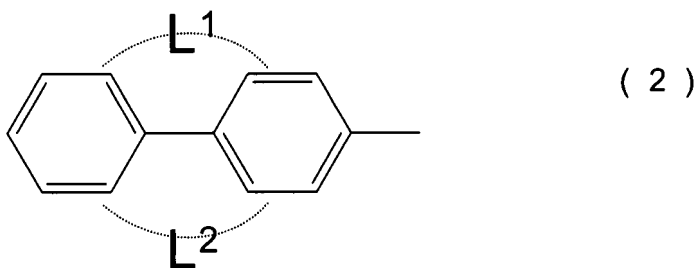
Thus, Kobori '039 does not disclose all limitations of applicants' claims 1-2, and therefore, it is not a proper basis for a rejection under § 102(b). Applicants respectfully request reconsideration and withdrawal of this rejection.

5. Claims 1-7 and 9-10 were rejected under 35 U.S.C. § 103(a) over Ishida et al. EP 1,221,434.

Applicants' claim 1 recites an anthracene derivative represented by following general formula (1):

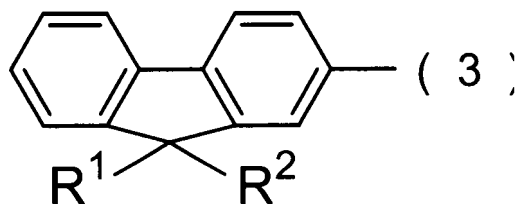


wherein Ar represents a substituted or unsubstituted group represented by following general formula (2):



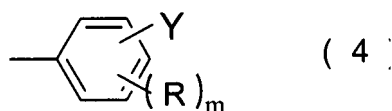
$L^1$  and  $L^2$  each representing a substituted or unsubstituted linking group wherein the two phenyl rings in formula (2) are linked through one or more carbon atoms and the two phenyl rings are not conjugated, which forms a cyclic structure, and at least one of the groups represented by  $L^1$  and  $L^2$  being present with proviso that

when Ar represents a group represented by a following general formula (3):



wherein  $R^1$  and  $R^2$  each represent hydrogen atom, a substituted or unsubstituted alkyl group having 1 to 6 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 6 carbon atoms or a substituted or unsubstituted phenyl group,

(i) Ar' represents an aryl group represented by following general formula (4):

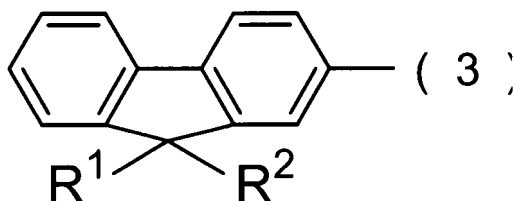


wherein Y represents a substituted or unsubstituted aromatic condensed cyclic residue group having 10 or more nuclear atoms or a substituted or unsubstituted aromatic non-condensed cyclic residue group having 12 or more nuclear atoms, R represents a substituted or unsubstituted alkyl group having 1 to 50 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 50 carbon atoms, a substituted or unsubstituted aryl group having 6 to 50 nuclear carbon atoms, a substituted or unsubstituted aromatic heterocyclic group having 5 to 50 nuclear atoms, a substituted or unsubstituted aryloxy group having 5 to 50 nuclear atoms or a substituted or unsubstituted arylthio group having 5 to 50 nuclear atoms, and **m** represents an integer of 0 to 4, or

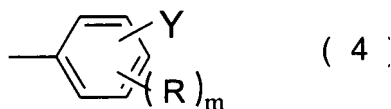
(ii) at least one of **a** and **b** does not represent 0, and X represents a substituted or unsubstituted alkyl group having 4 to 50 carbon atoms, a substituted or unsubstituted alkoxy group having 4 to 50 carbon atoms, a substituted or unsubstituted cycloalkyl group having 5 to 50 carbon atoms, a substituted or unsubstituted aralkyl group having 6 to 60 carbon atoms, a substituted or unsubstituted aryl group having 10 to 50 nuclear carbon atoms, a substituted or unsubstituted aromatic heterocyclic group having 10 to 50 nuclear atoms, a substituted or

unsubstituted aryloxyl group having 5 to 50 nuclear atoms or a substituted or unsubstituted arylthio group having 5 to 50 nuclear atoms.

None of Ishida '434 exemplified compounds or formulae discloses all elements of applicants' claims. The Ishida '434 compounds cited against this application disclose an Ar group represented by a following general formula (3):



The cited compounds, however, do not disclose, as required by applicants' claims, the claimed Ar' group represented by general formula (4):



or the claimed X group.

Furthermore, applicant's claim 1 is not obvious in view of Ishida '434. The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness. See *In re Baird*, 16 F.3d 380, 382 (Fed. Cir. 1994); MPEP 2144.08. In addition, there is no indication in Ishida '434 that crystallization is suppressed. On the other hand, the present application, shows that the claimed compounds exhibit great efficiency because crystallization is suppressed (see abstract and Table 1 at page of 59 of the specification, comparing the claimed compounds to Comparative Example 1-5).

Therefore, Ishida '434 does not disclose all elements of applicant's claimed invention, and further discloses nothing that would have suggested applicant's claimed invention to one of ordinary skill in the art. Furthermore, there is no disclosure or teaching in Ishida '434, or otherwise in this record that would have suggested the desirability of modifying any portions



thereof effectively to anticipate or suggest applicant's presently claimed invention. For all the foregoing reasons, applicant respectfully requests reconsideration and withdrawal of this rejection.

6. Claim 7 was rejected under 35 U.S.C. § 103(a) over Shi '721. Claim 7 depends from independent claim 1.

As discussed above, Shi '721 does not disclose all elements of applicants' claim 1. In addition, Shi '721 discloses nothing that would have suggested applicant's claimed invention to one of ordinary skill in the art. Furthermore, there is no disclosure or teaching in Shi '721, or otherwise in this record that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest applicant's presently claimed invention. For all the foregoing reasons, applicant respectfully requests reconsideration and withdrawal of this rejection.

7. Claim 4-10 were rejected under 35 U.S.C. § 103(a) over Kobori '039. Claim 4-10 depend from independent claim 1.

As discussed above, Kobori '039 does not disclose all elements of applicants' claim 1. In addition, Kobori '039 discloses nothing that would have suggested applicant's claimed invention to one of ordinary skill in the art. Furthermore, there is no disclosure or teaching in Kobori '039, or otherwise in this record that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest applicant's presently claimed invention. For all the foregoing reasons, applicant respectfully requests reconsideration and withdrawal of this rejection.

For the foregoing reasons, all claims 1-11 are now fully in condition for allowance, which is respectfully requested. The PTO is hereby authorized to charge or credit any necessary fees to

Applicant : Motohisa IDO *et al.*  
Serial No. : 10,519,934  
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Deposit Account No. 19-4293. Should the Examiner deem that any further amendments would be desirable in placing this application in even better condition for issue, he is invited to telephone Applicant's undersigned representative.

Respectfully submitted,

Date: September 25, 2007

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